<u>01SECTION 09901 - REPAINTING (EXTERIOR AND INTERIOR)</u>

PART 1 - GENERAL

1.01 GENERAL CONDITIONS

As specified in Section 00700.

1.02 GENERAL REQUIREMENTS

A. <u>Inspection and Approvals</u>: The Contractor shall obtain written approval from the Engineer upon completion of each phase of work (phases of work are: surface preparation and spot prime, prime, first finish coat, second finish coat) before proceeding into the next phase or work. The Contractor shall give the Engineer one day (24 hours minimum) advance notice of completion of any phase of work for a work area when he deviates from the previously-submitted work schedule noted under Section 1.03 C. The Contractor shall provide necessary access to areas to be inspected.

Failure to obtain approval of any phase of work for a work area may result in redoing the operation at no cost to the State.

B. Right of Rejection: The Engineer shall have the right to reject all work which is not in compliance with the plans and specifications. Rejected work shall be redone at no cost to the State.

In addition, the Engineer shall have the right to require the immediate removal of any paint applicator who demonstrates negligence, lack of competence or repeated non-compliance with the contract requirements.

1.03 <u>SUBMITTALS</u>

A. Schedule of Finishes

1. 4 sets of the proposed painting finish schedule shall be submitted to the Engineer for approval. The schedule shall indicate the spread rate at which the proposed paint / coating will be applied to achieve the final dry film thickness indicated on the Schedule of Finishes under Section 2.02.

NOTES TO ARCHITECT

This specification covers <u>repainting</u> work only. The requirements noted herein should be modified to address the painting of <u>new</u> work where included in your project.

Note:

1) Guidance regarding the use of airless spraying should be included in new CIP projects and CIP renovation projects. 2) Airless spraying restrictions noted herein should not be applied to new 1st increment projects. Per Cen.Svc. request, airless spraying shall not be used for R&M and R&A projects at this time. The specification shall be modified as necessary to require application by brush and roller.

When special paints and/or coatings having objectionable odors are specified (e.g. epoxy paints), they shall be applied after business hours or special ventilation shall be provided to ensure these odors do not adversely affect the occupants of the building. The design consultant shall be responsible for the identification of these paints and for the inclusion of the necessary precautions in their design.

Modify the "phases of work" to conform to the number of coats selected for your project.

B. Color Samples

- 1. 3 sets of each color finish sample shall be submitted to the Engineer for approval.
- 2. After the color finish sample has been approved, one set of color finish samples painted onto 8-1/2" x 11" cardboard shall be submitted to the Engineer. The cardboard shall be divided into 4 horizontal strips and painted as follows:
 - a. Prime 3 strips starting from the bottom.
 - b. 1st coat bottom 2 strips.
 - c. 2nd coat bottom strip.
- C. <u>Schedule of Operations</u>: Before work on the project is commenced, 4 complete sets of a work schedule showing his sequence of opertions and dates shall be submitted by the Contractor to the Engineer.
- D. <u>Certifications</u>: 4 copies of asbestos-free, lead-free, zinc-chromate-free, strontium-chromate-free, cadmium-free and mercury-free paint certificates shall be submitted to the Engineer. Should the Contractor require additional copies for distribution to his suppliers and sub-contractors, he shall include these additional copies along with his submittal.
- E. Manufacturer's Product Data Sheets: 4 copies of the Manufacturer's Product Data Sheets for the primers, paints, coatings, solvents, sealing and patching materials, sealants and caulking shall be submitted to the Engineer. Data sheets shall indicate thinning and mixing instructions, required film thickness (mil) and application instructions. Should the Contractor require additional copies for distribution to his suppliers and sub-contractors, he shall include these additional copies along with his submittal.
- F. Manufacturer's Material Safety Data Sheets: 4 copies of the Manufacturer's Material Safety Data Sheets for coatings, solvents, and other hazardous materials shall be submitted to the Engineer. Should the Contractor require additional copies for distribution to his suppliers and sub-contractors, he shall include these additional copies along with his submittal.

(See the following page for additional "Notes" regarding failure of existing paint.)

Where the existing paint finish has failed (e.g. blistering, peeling, efflorescence, etc.), determine the cause of the failure (e.g. water infiltration, lack of waterproofing, paint incompatibility, etc.) and address its correction to ensure proper paint adhesion.

Show areas of paint failure on the drawings.

Modify paragraph **B.2** as necessary based on the number of coats required. (See "Notes to Architect" under Sub-Section 1.06 D.)

Paragraph **D**, **F**, and **G** includes guidance noted in Technical Memorandum #77 dated Rev. Oct. 20, 1992.

- G. Receipt of Delivery: 3 copies of the receipt signed by the user's representative, attesting to delivery of extra paint as required under Sub-Section 3.03 C - Extra Paint shall be submitted to the Engineer.
- H. <u>Standards</u>: 3 copies of the Surface Preparation Standards referenced under Section 3.01 Surface Preparation.
- I. <u>Comprehensive Spray Plan</u>: Where the Contractor proposes to employ airless spraying, a Comprehensive Spray Plan including the following information shall be submitted to the Engineer for approval:
 - Documentation that the individual spray applicator(s) on the project have completed an approved "Spray Applicator Certification Program".
 - 2. The overspray protection methods proposed.
 - The spray application instructions and recommendations of the paint manufacturer he proposes to use.
 - Proposed scheduling of existing airconditioning and ventilation equipment shutdown and/or covering of existing air intake, return and diffuser grilles.
- J. Certificate of Public Liability and Property

 <u>Damage Insurance</u>

Delete this paragraph for other than school and University projects. See also Sub-Section 3.03 C. Note: This incorporates guidance noted under Technical Memorandum #77 dated Rev. Oct. 20, 1992.

Delete this paragraph where the building is not centrally air-conditioned.

1.04 ANALYZING AND TESTING

All paints and their applied thickness shall be subject to testing whenever the Engineer deems necessary to determine conformation to the requirements of these specifications. Should testing by a laboratory be required, the laboratory shall be selected by the State and the cost of testing shall be borne by the Contractor. However, should test results show that the paint is in compliance with this specifications, the cost will be borne by the State.

All rejected material shall be removed from the job

site immediately. Surfaces painted with the rejected material shall be redone at no additional cost to the State.

Where the required paint thickness is deficient, the affected surface(s) shall be recoated as necessary to provide the required paint thickness at no additional cost to the State.

1.05 QUALITY ASSURANCE

Where the Contractor proposes to employ airless spraying, the applicator(s) shall have completed an approved "Spray Applicator Certification Program" conducted by the Painting Industry of Hawaii.

As a minimum, the certification shall include material and equipment selection, use and maintenance, hands-on application and safety training.

1.06 GUARANTY

- A. The Contractor shall guarantee that the work performed under this section conforms to the contract requirements and is free of any defect of material or workmanship performed by the Contractor. Such guarantee shall continue for a period of 2 years from the date of project acceptance during which period the Contractor shall remedy at his own expense any such failure to conform or any such defect.
- B. The State shall notify the Contractor in writing within a reasonable time after discovery of any failure or defect.
- C. Should the Contractor fail to remedy any failure or defect described in Paragraph A above within 10 working days after receipt of notice thereof, the State shall have the right to repair or otherwise remedy such failure or damage at the Contractor's expense.

1.07 SPECIAL REQUIREMENTS

A. <u>Codes</u>: The Contractor shall comply with the State OSHL (Occupational Safety and Health Law) and all pollution control regulations of the State Department of Health.

B. <u>Protection</u>

1. Persons

a. The Contractor shall take all necessary precautions to protect public pedestrians including tenants from injury.

- b. The Contractor shall provided, erect and maintain safety barricades around scaffolds, hoists and wherever Contractor's operations create hazardous conditions in order to properly protect the public and tenants.
- 2. Completed Work: The Contractor shall provide all necessary protection for wet paint surfaces.
- 3. Protective Covering and Enclosures: The Contractor shall provide and install protective covering over furniture, equipment, floor and other areas that are not scheduled for treatment. Protective covering shall be clean sanitary drop cloth or plastic sheets. Paint applied to surfaces not scheduled for treatment shall be completely removed and surfaces shall be returned to their original condition.

Where paint application will be performed by use of airless spraying, the Contractor shall ensure that protective enclosures are erected to prevent the escape of overspray from the work area.

4. <u>Safeguarding of Property</u>: The Contractor shall take whatever steps may be necessary to safeguard his work and also the property of the State and other individuals in the vicinity of his work area during the execution of this Contract. He shall be responsible for and make good on any and all damages and for losses to work or property caused by his or his employee's negligence. Where the damaged property cannot be cleaned and restored to its original condition (i.e. prior to being damaged) it shall be replaced with a new product of equal quality. No

proration or use of "used" products will be permitted.

- a. The Contractor shall assume that cars will not be temporarily relocated from parking areas during spray painting work.
- b. Paint overspray shall not carry more than 5 l.f. beyond the building eave line nor within 10 l.f. of pedestrians or property and surfaces not scheduled to be painted.

Spray painting shall immediately cease when overspray carries beyond these specified limits and will not continue until protective barriers are erected to properly contain the overspray and damages caused by the overspray have been corrected.

c. The Contractor shall be assessed \$300.00 for each incidence of property or personal damage caused by overspray until such time that a satisfactory settlement has been agreed upon by the damaged party and corrective action has been completed. All corrective action shall be settled within 24 hours from the time the damage is discovered.

Should the Contractor fail to take corrective action in a timely and expeditious manner, the Engineer shall contact the Contractor's Insurance company to seek resolution on the matter.

- 5. Fire Safety: The Contractor shall direct his employees not to smoke in the vicinity and exercise precautions against fire at all times. Waste rags, plastic (polyester sheets), empty cans, etc. shall be removed from the site at the end of each day.
- C. <u>Storage Area for Materials</u>: No paint material, empty cans, paint brushes and rollers may be stored in the building(s). They shall be stored in separate storage facilities away from the building(s).

The Contractor may furnish a job site storage facility. Such facility shall comply with the requirements of the local Fire Department. The storage area shall be kept clean and the facility shall be locked when not in use or when no visual supervision is possible.

Modify the number of coats required based on the condition of the existing painted surface e.g.:

- * Full priming of the surface is not necessary if the existing paint surface is tight, not chalky and is to be repainted with a paint of similar type and color.
- * For interior surfaces to be repainted in similar color, only one finish coat is required.

Note: Compatibility between the new and existing paint is essential. It is the

- D. <u>Sequence of Operations</u>: The sequence of operations shall divide the surfaces into work areas and present a schedule for:
 - 1. Surface preparation and spot prime.
 - 2. Prime coat.
 - 3. First finish coat.
 - 4. Second finish coat.

Minimum interior work area shall be the complete inside surfaces of one room. Minimum exterior work area shall be one side of a single story building or one side of one story on multiple story buildings.

consultant's responsibility to verify the type of existing paint. If unknown, an appropriate oil-based primer shall be specified.

Note: This amends and includes guidance noted in Technical Memorandum #22 dated 8/11/75.

Select applicable items. Complete by indicating the number of buildings and building designations.

1.08 AREAS (SURFACES/STRUCTURES) TO BE PAINTED

- A. Structures:
 - 1. _____ buildings, Building ___ _____, ____, complete interior and exterior surfaces.
 - 2. _____ complete walkways.
 - 3. _____ flag poles.
 - 4. Miscellaneous.

B. Surfaces to be Painted:

1. Interior: All existing interior painted surfaces shall be painted unless otherwise indicated on the plans and/or specifically deleted in these specifications.

Interior surfaces to be painted shall be those surfaces not exposed to weather in an area enclose by 4 walls.

Also, a surface shall be considered an interior surface and painted as such whenever Add other items to suit the color is that of the existing interior field conditions. color.

Extent of treatment for special items is as follows:

Show the full extent of repainting work on the drawings.

Add reference to new surfaces if applicable to your project.

Select applicable items.

- a. Ceiling as indicated on plans.
- b. Closets and cabinets with doors interior surfaces shall not be treated unless specifically noted.
- c. Doors (including closet) both faces, top and side edges. Cabinet doors - both faces and all edges.
- d. Wood vanes of jalousies refer to exterior work.
- e. All movable furniture such as portable bookshelves, cubicles and cabinets shall not be painted.
- 2. Exterior: All existing exterior painted surfaces shall be painted unless otherwise indicated on the plans and/or specifically deleted in these specifications.

Exterior surfaces to be painted shall be any surface exposed to weather in an area not enclosed by 4 walls and a roof. Also, a surface shall be considered and painted as an Add other items to suit exterior surface whenever the color is that of the existing exterior color.

The extent of treatment for special items is as follows:

- a. Wood vanes of jalousies all surfaces inside and outside.
- b. Exterior doors both faces, top, bottom and side edges.
- c. Concrete soffits bottom and edges.
- d. Concrete stairs soffit and both sides and edges of concrete railing.
- e. Grille work or mesh both sides and inside openings.
- f. G.I. pipes and conduits, electric boxes, exhaust ducts, fan housing and similar appurtenances - exposed surfaces.

1.09 OTHER INCIDENTAL WORK TO BE PERFORMED BY CONTRACTOR

Select applicable items. field conditions.

Field verify items which will require removal and modify spec as needed. Note:

1) The DAGS Project Coordinator shall advise

A. <u>Interior</u>

 Unless otherwise specified, the Contractor is responsible for moving about all furniture and equipment to provide himself with sufficient working space.

The Contractor shall protect these items and make good any damage to them at no cost to the State. After the painting of the room is completed, the Contractor shall replace all furniture and equipment to their original locations.

- 2. The Contractor shall carefully remove and neatly store away or properly protect inplace curtains, blinds and ______. Removed items shall be reinstalled at the completion of the work.
- All items on shelving and in cabinets to be painted will be removed by the user personnel prior to painting work.
- B. <u>Shrubbery and plants</u> shall be trimmed six inches back from surfaces to be painted and protected from damage.
- C. <u>Areas Inaccessible to Normal Painting</u>: The Contractor shall:
 - a. Remove and reinstall expanded mesh security screens.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Lead Prohibition: All paints shall be lead-free.
- B. Mercury Prohibition: All paint shall be mercury-free.
- C. <u>Chromate Prohibition</u>: All paint shall be free of zinc-chromate and/or strontium-chromate.
- D. <u>Cadmium Prohibition</u>: All paint shall be cadmium-free.
- E. Material shall be equal in quality to that specified under the Schedule of finishes and any given finish shall be as labeled by one manufacturer.

NOTES TO ARCHITECT

the user that items such as pictures, charts, etc. should be removed and reinstalled by the teachers or maintenance staff.

2) The DAGS Project
Coordinator shall keep
the user apprised on the
status and scheduling of
the project, including
cancellation, should it
occur. In the event of
cancellation, this will
save the user from going
through the trouble of
packing and fustration
when the project is not
done.

Include additional items to suit field conditions. Delete if not required.

Where security screens are present, verify the method by which they are attached to the building and indicate in the specifications. If they are to be removed and reinstalled, address the type of fasteners required.

Paragraph G.:

Add "Mameco International, Inc., Sonneborn Building Products and VIP Waterproofing Coatings" when waterproof coatings are specified.

<u>Finish Schedule</u>: Provide a Color and Finish Schedule as part of the Bidding Documents.

- F. All materials shall be delivered to the job site in undamaged original containers bearing the manufacturer's label and shall be stored in such a manner as to prevent damage. All rejected materials shall be removed from the job site immediately.
- G. Paints shall be as manufactured by Ace, Benjamin Moore, Cabot's, Carboline, Dupont, Dutch Boy, Fine Line Paint Corp., ICI Ameritone, ICI Decratrend, ICI Devoe, ICI Dulux, ICI Fuller-O'Brien, ICI Glidden, ICI Sinclair, Martin Senour, Olympic Stain, Pervo, Pittsburg, Porter Intl., Pratt & Lambert, Rust-Oleum, Sherwin-Williams, Smiland (Styletone), Spectra-Tone, Thoro Systems, Tnemec, United Paint and Coatings or approved equal.
- H. Thinning of paint shall be done using material recommended by the manufacturer. Mix proprietary products according to manufacturer's printed specifications. Compound thinner, mineral oil, kerosene, refined linseed oil, or gasoline shall not be used for thinning.
- I. Except for metal primers all paint shall contain the maximum amount of mildewcide per gallon of paint permitted by the mildewcide manufacturer without adversely affecting the quality of the paint.
- J. The supplier shall submit a signed certificate indicating the amounts of mildewcide added by both the paint manufacturer and the paint supplier.

2.02 SCHEDULE OF FINISHES

- A. The Schedule of Finishes is made for the convenience of the Contractor and indicates the types and quality of finishes to be applied to the surfaces.
- B. Any existing painted surfaces not specifically noted in the finish schedule shall be finished to match adjoining work.

PART 3 - EXECUTION

3.01 SURFACE PREPARATION

A. <u>General</u>

Colors selected should not require unnecessary maintenance to present a clean appearance. The colors selected shall also be agreeable with DAGS and the User Agency. Refer to quidance noted in Technical Memorandum #44 dated March 22, 1993. Gloss or Semi-Gloss finish paints shall be used for interior and exterior work. Flat finish paints shall not be used unless approved by DAGS Central Services Division. To facilitate matching, hardwood surfaces shall be stained before receiving a clear finish. Note: This amemds and includes quidance noted in Technical Memorandum #22 dated August 25, 1975.

NOTES TO ARCHITECT

(see following page for additional notes)

In addition, unless required for a particular application, oil-based paints should not be specified, [oilbased paints tend to discolor (i.e. yellow) over time and creates adhesion problems on repainting projects]. Saponification (reaction between the oil & alkaline conditions) is also a potential problem.

For projects on the Big Island, refer to Tech Memo #104 dated 12/31/97 regarding the provision of alkali resistant primers and #112 dated 08/20/96 regarding roof paints.

1. High Pressure Water Washing

- a. High pressure water washing may be used in lieu of brush washing to remove loose paint material, chalking, dirt, and debris from exterior surfaces to be painted. It shall be performed by skilled mechanics experienced in the use and operation of the sprayer equipment.
- b. High pressure water washing does not replace proper preparatory work such as sanding of the substrate prior to painting. Surface contaminants and loose paint material remaining after the surface has been pressure washed shall be removed by other means as necessary to properly prepare the surface.
- c. The pressure rating of the sprayer equipment in addition to the nozzle type and size shall be of the proper type to clean the surface without damaging the substrate. Any damage shall be repaired and/or restored to its original condition at no cost to the State.
- d. Proper precautions shall be taken to prevent over-spray and water infiltration into the building through doors, windows, vents, louvers and other building openings. Water and debris entering the building shall be cleaned-up immediately and any damaged area resulting therefrom shall be repaired and/or restored to its original condition at no cost to the State.
- e. In removing mildew, high pressure water washing shall only be used to wash the surface after is has first been sterilized with a treatment solution specified under Section 3.01 B. below.

2. Mildew Removal

Remove all mildew and sterilize the surface to be painted using one of the following methods:

Apply a treatment solution composed of the following ingredients and in the noted proportions to the affected surface using a sponge or low-pressure sprayer:

2/3 cup TSP (Trisodium Phosphate)
1 quart household bleach

3 quarts warm water

NOTES TO ARCHITECT

Indicate the required dry mil thickness of the specified paint on the schedule.

Surface Prep (Wood, Plaster, Concrete, Masonry, Metal & Others): Modify the surface preparation methods noted as necessary to suit your specific project conditions and to address health and environmental concerns (e.g. Existing lead based paint surfaces, substrates containing asbestos, etc.). Modifications shall ensure that the proper precautions are taken in addition to ensuring proper paint adhesion is attained. Refer to quidance noted in Technical Memorandum #87 dated July 12, 1993.

(continued on next page)

Where existing acoustical tiles are to be repainted, their condition shall be carefully checked to ensure that its surface will support/accept being repainted.

Sometimes the material's surface delaminates upon paint application.

Show areas of mildew on the building elevations and reflected ceiling plan.

Delete this section where not applicable.

Note: Household bleach shall not be mixed with ammonia or any detergents or cleaners containing ammonia as this will create a poisonous gas.

Scrub the surface as necessary to completely remove the mildew.

or,

Apply a commercial mildew treatment solution such as Purex, Jomax Remover or equal in strict accordance with the manufacturer's recommendations and instructions.

Following treatment, the surface shall be cleaned with potable water and allowed to thoroughly dry before priming, painting or the applying of sealing and caulking compounds.

3. Cracks and openings found at joints and where different materials abut each other (e.g CMU / concrete, CMU or concrete / wood, etc.) shall be sealed with a caulking compound compatible with the substrate and primer/paint. The caulking shall be applied and allowed to set in accordance with the manufacturer's recommendations and instructions.

B. Wood to be Repainted

- Remove from surfaces to be repainted all foreign matter such as nails, screws, staples, tape and gum.
- Remove all loose, blistered, scaled, crazed or chalky finish to an existing tight and firm finish. High pressure water washing as described in Section 3.01 A.1. above may be used for exterior surfaces.
- Remove all mildew as noted in Section 3.01
 A.2. above.
- 4. Where the existing finish remains tight and firm, prepare the surface by lightly sanding. Where the paint has been removed, sand the edges of scarred areas to a smooth feathered edge.
- 5. Wash all surfaces with a solution of T.S.P.

Make a field check of existing door/jamb conditions. Where the space between the door and jamb is tight or if there are signs of binding or surface-to-surface contact, call for sanding of the door edge (wood doors) or adjustment of the door and/or frame (metal doors) to eliminate touching of newly painted surfaces.

Delete where not applicable.

(trisodium phosphate) and water or other appropriate solution to remove any accumulated film of wax, oil, grease, smoke, dust, dirt, chalking or other foreign matter which would impair the bond of, or bleed through the new paint finish. After washing, rinse the surface with potable water and allow to thoroughly dry.

Rinsing may be performed by high pressure water washing as noted in Section 3.01 A.1. above for exterior surfaces. However, any lifting of the paint or scarring caused by this rinsing operation shall be resanded to a feathered edge.

- 6. After cleaning and/or washing of the surface with water, the wood shall not be primed, painted or sealed unless it has been allowed to thoroughly dry for a minimum of 24 hours and until the moisture content of the wood is less than 15% when measured with an electronic moisture meter.
- 7. Fill holes (nail, tack, staple, etc.), cracks, open joints and other imperfections with appropriate compound and allow to set (door and trim included). Seal and caulk all openings which will permit the entrance of water. Sealing and caulking compounds shall be compatible with the substrate and primer/paint and shall be applied and allowed to set in accordance with the manufacturer's recommendations and instructions.
- 8. Spot prime areas where bare wood or fill material is exposed with the specified primer and feather out onto adjacent paint.

C. Plaster (Smooth and Sand Finish) to be Repainted

- Remove from surfaces to be repainted all foreign matter such as nails, screws, staples, tape and gum.
- Remove all loose, blistered, scaled, crazed or chalky finish to an existing tight and firm finish. High pressure water washing as described in Section 3.01 A.1. above may be used for exterior surfaces.

Modify and amend the surface preparation requirements for Plaster, Concrete and Masonry as necessary to address efflorescence.

Delete where not applicable.

3. Remove all mildew as noted in Section 3.01 A.2. above.

Delete where not applicable.

- 4. Smooth plaster finish: Where the existing finish remains tight and firm, prepare the surface by lightly sanding. Where the paint has been removed, sand the edges of scarred areas to a smooth feathered edge.
- 5. Wash all surfaces with a solution of T.S.P. and water or other appropriate solution to remove any accumulated film of wax, oil, grease, smoke, dust, dirt, chalking or other foreign matter which would impair the bond of, or bleed through the new paint finish. After washing, rinse potable water and allow to thoroughly dry for a minimum of 24 hours.

Rinsing may be performed by high pressure water washing as noted in Section 3.01 A.1. above for exterior surfaces. However, any lifting of the paint or scarring caused by this rinsing operation shall be resanded to a feathered edge.

- 6. Scarred plaster areas shall be patched with spackling compound or taping system. Fill holes, cracks, open joints and damaged areas with vinyl base spackle or plaster patch. Apply texture, if required, to match existing textured surfaces.
- 7. Spot prime areas where plaster, fill or patch material is exposed with the specified primer and feather out onto adjacent paint.

D. Concrete (Smooth Finish) to be Repainted

- Remove from surfaces to be repainted all foreign matter such as nails, screws, staples, tape and gum.
- Remove all loose, blistered, scaled, crazed or chalky finish to an existing tight and

firm finish. High pressure water washing as described in Section $3.01\ \text{A.1.}$ above may be used for exterior surfaces.

Delete where not applicable.

- 3. Remove all mildew as noted in Section 3.01 A.2. above.
- 4. Where the existing finish remains tight and firm, prepare the surface by lightly sanding. Where paint has been removed, sand the edges of scarred areas to a smooth feathered edge.
- 5. Wash all surfaces with a solution of T.S.P. and water or other appropriate solution to remove any accumulated film of wax, oil, grease, smoke, dust, dirt, chalking or other foreign matter which would impair the bond of, or bleed through the new paint finish. After washing, rinse potable water and allow to thoroughly dry for a minimum of 24 hours.

Rinsing may be performed by high pressure water washing as noted in Section 3.01 A.1. above for exterior surfaces. However, any lifting of the paint or scarring caused by this rinsing operation shall be resanded to a feathered edge.

- 6. Seal all cracks hairline to 1/8" in width with concrete patching compound. All cracks over 1/8" in width shall be sealed with Tuff Patch (Fibre-Glass Cloth System) or equal method before paint application. All patching shall be done in accordance with the manufacturer's recommendations and instructions.
- 7. All holes 1/4" in diameter or greater shall be sealed with Tuff Patch (Fibre-Glass Cloth System) or equal method before paint application. All patching shall be done in accordance with the manufacturer's recommendations and instructions.

8. Spot prime areas where bare concrete, seal or patch material is exposed with the specified primer and feather out onto adjacent paint.

E. Masonry Block to be Repainted

- Remove from surfaces to be repainted all foreign matter such as nails, screws, staples, tape and gum.
- 2. Remove all loose, blistered, scaled, crazed or chalky finish to an existing tight and firm finish. High pressure water washing as described in Section 3.01 A.1. above may be used for exterior surfaces provided cracks and openings have been sealed to prevent water infiltration.

Delete where not applicable.

- 3. Remove all mildew as noted in Section 3.01 A.2. above.
- 4. Where the existing finish remains tight and firm, prepare the surface by lightly sanding. Where paint has been removed, sand the edges of scarred areas to a smooth feathered edge.
- 5. Wash all surfaces with a solution of T.S.P. and water or other appropriate solution to remove any accumulated film of wax, oil, grease, smoke, dust, dirt, chalking or other foreign matter which would impair bond of, or bleed through the new paint finish. After washing, rinse potable water and allow to thoroughly dry for a minimum of 24 hours.

Any lifting of the paint or scarring caused by this rinsing operation shall be resanded to a feathered edge.

6. Seal all cracks hairline to 1/8" in width with concrete patching compound. All cracks over 1/8" in width shall be sealed with Tuff Patch (Fibre-Glass Cloth System) or equal method before paint application. All patching shall be done in accordance with the manufacturer's recommendations and instructions.

- 7. All holes 1/4" in diameter or greater shall be sealed with Tuff Patch (Fibre-Glass Cloth System) or equal method before paint application. All patching shall be done in accordance with the manufacturer's recommendations and instructions.
- 8. Spot prime areas where bare masonry, seal or patch material is exposed with the specified primer and feather out onto adjacent paint.

F. Ferrous Metal and Galvanized Metal

- Remove from surfaces to be repainted all foreign matter such as tape and gum.
- Remove all loose, blistered, scaled, crazed or chalky paint finish to an existing tight and firm finish.
- Remove all mildew as noted in Section 3.01
 A.2. above.
- 4. Remove all rust, loose mill scale and loose and blistering paint by power tool chipping, de-scaling, sanding, wire brushing and grinding down to bare metal (only tightly adhering surface rust, mill scale and paint which cannot be removed with a dull putty knife remaining) in accordance with Steel Structures Painting Council (SSPC) Standard SP3. Care shall be taken so that the surface in not burnished during cleaning.
- 5. Where the existing finish remains clean, tight and firm, prepare the surface by sanding. Where paint has been removed, sand scarred areas to a smooth feathered edge.
- 6. Completely wipe all surfaces with mineral spirits or other appropriate solution as required to remove accumulated film of wax, oil, grease, smoke, dust, dirt, chalky or other foreign matter which would impair the bond of, or bleed through the new paint finish.
- 7. Allow the surfaces to thoroughly dry and immediately spot prime bare metal areas with the specified primer and feather out onto adjacent paint.

Delete where not applicable.

If existing work is badly rusted and its removal would destroy it or compromise its integrity, call for its removal and replacement.

Specify specific surface prep. stds. such as those established by the Steel Structures Painting Council (SSPC) or the National Assoc. of Corrosion Engineers (NACE) where necessary to address specific project conditions and ensure proper paint adhesion. Require submittal of the referenced standard for use by the Inspector in checking acceptability of the surface prep.

3.02 PAINT APPLICATION

A. <u>General</u>

- All work shall be done in a workmanlike manner by skilled and experienced mechanics and shall conform to the best painting practices.
- 2. All materials shall be applied in strict accordance with the manufacturer's specifications, including spread rates, and the finished surfaces shall be free from runs, sags, drops, ridges, waves, laps, streaks, brush marks and variations in color, texture and finish (glossy or dull). The coverage shall be complete and each coat shall be so applied as to produce a film of uniform thickness.

No paint, varnish or enamel shall be applied until the preceeding coat is thoroughly dry and approved.

- 3. No exterior painting of unprotected surfaces shall be done in rainy, damp weather. Coats shall be applied only to surfaces that are thoroughly dry and only under such combination of humidity and temperature that will ensure proper paint application.
- 4. Any mixing shall be done outside the building.
- B. <u>Colors</u>: Each coat shall be tinted a different shade from the preceding coat. Colors shall be in accordance with the following schedule:

3.03 MISCELLANEOUS

A. <u>Installation of Removed Items</u>: After completion of final paint coat, removed items shall be reinstalled.

NOTES TO ARCHITECT

For new CMU work, include back-rolling of paint that has been spray-applied to the surface to ensure full coverage into holes and crevices.

Provide color schedule.

Program Bells shall be painted "Battleship Gray". Fire Bells shall be painted "Fire Engine Red".

B. Clean-up

- During the progress of the work, all debris, empty crates, waste, drippings, etc. shall be removed by the Contractor and the grounds about the areas to be painted shall be left clean and orderly at the end of each work day.
- 2. Upon completion of the work, staging, scaffolding, containers and all other debris shall be removed from the site. All paint, shellac, oil, or stains splashed or spilled upon adjacent surfaces not requiring treatment (hardware, fixture, floor, glass) shall be removed and the entire job left clean and acceptable.
- 3. Work to correct damage caused by overspray and punchlist items shall be performed during non-school or non-business hours if the work will inconvenience the building occupants. Where necessary for access during non-school or non-busines hours, the Contactor shall pay for custodial staff to gain entry and to secure the building.

Delete this paragraph for other than school or University projects.

C. Extra Paint

The Contractor shall provide extra paint in each of the different colors of exterior and interior paint used for walls, wainscot, eaves and ceiling to the school upon completion of the project. The paint shall be in unopened one gallon cans and shall be in the quantities listed below:

- Paint used over large areas, such as the exterior of the building and in several classrooms - 5 gallons of each color.
- Paint used in single room areas and in small areas, such as bathrooms and doors - 1 gallon of each color.